



# Epidemiologic Notes & Reports

Volume 32 Number 11

November 1997

## Recommendations on the Diagnosis and Classification of Diabetes Mellitus

An international committee of experts, convened under the auspices of the American Diabetes Association, reviewed 15 years of research and developed new recommendations regarding the diagnosis and classification of diabetes mellitus. These recommendations, the first since 1979, are supported by the American Diabetes Association, the National Institute of Diabetes and Digestive and Kidney Diseases, and the Centers for Disease Control and Prevention, Division of Diabetes Translation. The full report is in *Diabetes Care*, Vol. 20, No. 7, July, 1997.

### SUMMARY OF MAJOR RECOMMENDATIONS

#### Diagnostic Criteria

- The modified criteria are for diagnosis, and are not treatment criteria or goals for therapy.
- A fasting plasma glucose (FPG) value of  $\geq 126$  mg/dl is diagnostic for diabetes. This recommendation is based on new population-based data showing a sharp rise in adverse outcomes (i.e., microvascular complications) at or near this blood glucose level and an increased risk for macrovascular disease.
- The FPG is the preferred diagnostic test because of its ease of administration, convenience, acceptability to patients, and lower cost. However, the three ways to diagnose diabetes are: a FPG  $\geq 126$  mg/dl (after no caloric intake for at least 8 hours); or a casual plasma glucose (taken at any time of day)  $\geq 200$  mg/dl with the classic diabetes symptoms; or an oral glucose tolerance test (OGTT) value  $\geq 200$  mg/dl in the two hour sample.\*
- A fasting plasma glucose of 110 mg/dl has been chosen as the upper limit of "normal."

#### Classification/Name Changes

- Eliminate the terms "insulin-dependent diabetes mellitus" (IDDM) and "non-insulin-dependent diabetes mellitus" (NIDDM).
- Use Arabic (type 1 and type 2) rather than Roman (type I and type II) numerals to prevent confusion.
- Type 1 diabetes is characterized by beta cell destruction, usually leading to an absolute insulin deficiency.
- Type 2 diabetes is characterized primarily by insulin

## In this issue . . . .

### \*November is National Diabetes Month\*

Recommendations on the Diagnosis and Classification of Diabetes Mellitus	1 & 6
"Epi" Rapid Response Team 1997	2-4
Selected Reportable Diseases	5

resistance combined with relative (rather than absolute) insulin deficiency.

- Retain the category of Gestational Diabetes to describe diabetes that develops during pregnancy. No changes were recommended in the current diagnostic criteria; however, changes were recommended in the area of screening (see the section entitled "who should be tested").
- Two stages of impaired glucose metabolism that are intermediate between normal glucose homeostasis and diabetes have been defined. Although not clinical entities in their own right (in the absence of pregnancy), they are considered risk factors for future diabetes and cardiovascular disease: Impaired Fasting Glucose (IFG), a new category, when fasting plasma glucose is  $\geq 110$  but  $< 126$  mg/dl; and Impaired Glucose Tolerance (IGT), an existing category, when results of the more complicated oral glucose tolerance test are  $\geq 140$  but  $< 200$  mg/dl (in the two hour sample).

### Who should be tested -- and when

- Testing for diabetes should be considered for all asymptomatic, undiagnosed adults aged 45 years and above; and if normal, repeated at three year intervals.
- Consider testing at a younger age, or more frequently, those who are at higher risk of diabetes, including people who: are obese ( $\geq 120\%$  of their ideal body weight or a Body Mass Index [ BMI ] of  $\geq 27$  kg/m<sup>2</sup>); have a first degree relative with diabetes; are members of a high-risk ethnic group (African American, Hispanic, Native American, Asian); delivered a baby weighing more than nine pounds or were diagnosed with gestational diabetes mellitus; are hypertensive (blood pressure at or above 140/90 mm/Hg); have an HDL cholesterol level of 35 mg/dl or lower and/or a triglyceride level of 250 mg/dl or higher; or on previous testing, had IFG or IGT.

Recommendation of Diabetes Mellitus (see page 6)

\*In the absence of unequivocal hyperglycemia with acute metabolic decompensation, one of these three tests should be used on a different day to confirm diagnosis.

## "Epi" Rapid Response Team 1997 10 YEAR ANNIVERSARY

The "Epi" Rapid Response Team was formed in 1987 to assist with the investigation and control of disease outbreaks in Kentucky. Its membership of trained "Responders" now stands at 74 members. New members are added to the roster through participation in a special training course given by the Division of Epidemiology and Health Planning or by conducting an epidemiologic investigation under Division supervision. Except for the eight state staff, all the members are employed by local health departments.

During the September 1997 annual conference at Pine Mountain State Park, five charter members were recognized for their decade of service. Charter members are Virgie Claycomb, ARNP, Lake Cumberland District Health Department; Linda Madden, RN, Cumberland Valley District Health Department; Murline Penn, RN, West Bluegrass District Health Department; Martha Vannatter, RN, Fivco District Health Department; and Rhenda Mills, RN, Nurse Epidemiologist, Immunization Program, Division of Epidemiology and Health Planning.

The "Responders" are available to provide consultation about communicable diseases and to assist with the investigation and control of disease outbreaks. Please call the "Responder" in your area if you have questions.

### STATE MEMBERS - DIVISION OF EPIDEMIOLOGY & HEALTH PLANNING -

**Karen Adams, R.N.**  
Nurse Consultant  
Surveillance & Investigations Branch  
502/564-3418

**Rhenda Mills, R.N.**  
Nurse Epidemiologist  
Immunization Program  
Communicable Disease Branch  
502/564-4478

**Clarkson Palmer, M.D., M.P.H.**  
Manager  
Communicable Disease Branch  
502/564-3261

**Donna J. Perkins, R.N.**  
Nurse Consultant  
Tuberculosis Control Program  
Communicable Disease Branch  
502/564-4276

**Ova D. Pittman**  
STD Area A Supervisor  
397 Knight Lane  
Benton, KY 42025  
502/354-9595

**Peggy Wright, R.N.-Team Leader**  
Nurse Consultant  
Communicable Disease Branch  
502/564-3261

### - DIVISION OF PUBLIC HEALTH PROTECTION & SAFETY -

**Brian Borders, R.S.**  
Department for Public Health  
Local Health, Sanitation Branch  
600 Hopkinsville St.  
Princeton, KY 42445  
502/365-6390

**Carolyn Boaz, Program Evaluator**  
Western Region  
Department for Public Health  
Local Health, Food Branch  
275 East Main Street  
Frankfort, KY 40601  
502/564-7181

### - DISTRICT HEALTH DEPARTMENT MEMBERS -

Barren River District Health Department  
**Ruby Baker, R.N.**  
**Carol Kersting, R.N.**  
1133 Adams Street  
P.O. Box 1157  
Bowling Green, KY 42102-1157  
502/781-8039

Cumberland Valley District Health Department  
Bell County Center  
**Nadine Powell, R.N.**  
310 Cherry Street  
P. O. Box 97  
Pineville, KY 40977  
606/337-7046

Hart County Center  
**Tom Buchanan, R.S.**  
505 Fairground Road  
P.O. Box 65  
Munfordville, KY 42765  
502/524-2511

Clay County Center  
**Linda Madden, R.N.**  
100 South Court Street  
Manchester, KY 40962  
606/598-2425

Bowling Green-Warren County Center  
**Vicki Weaver, R.N.**  
**Marcheta White, R.S.**  
1109 State Street; P.O. Box 1157  
Bowling Green, KY 42102-1157  
502/781-2490

Rockcastle County Center  
**John Payne, M.D.**  
Richmond St., P.O. Box 840  
Mt. Vernon, KY 40456  
606-256-2242

**"EPI"  
Rapid  
Response Team  
Celebrates**

**10 years of able investigation  
and control of disease  
outbreaks in Kentucky**

**Thanks from,  
Peggy Wright, RN**

**Team Leader  
Division of Epidemiology  
& Health Planning**

Buffalo Trace District Health Department  
Mason County Center  
**Doug Waldren, R.S.**  
120 West Third St.  
P.O. Box 9  
Maysville, KY 41056  
606/564-9447

Green River District Health Department  
Owensboro-Daviess County Center  
**Maurine Kohl, R.N.**  
**Connie Nalley, R.N.**  
502-686-7744  
Sarah Wells, R.S.  
1600 Breckinridge  
P.O. Box 309  
Owensboro, KY 42301-0309  
502-686-7747 ext. 1373

Lincoln Trail District Health Department  
**Rick Molohon, R.S.**  
1222 Woodland Drive  
P.O. Box 2609  
Elizabethtown, KY 42702-2609  
502-769-1601 ext. 117

Nenry County Center  
**Lloyd Penninston, R.S.**  
North Property Road  
P.O. Box 449  
New Castle, KY 40050  
502-845-7995

Pennyrile District Health Department  
Caldwell County Center  
**Betsy McDowell, R.N.**  
310 Hawthorne St.  
P.O. Box 327  
Princeton, KY 42445  
502-365-6571

Three Rivers District Health Department  
Gallatin County Center  
**Debbie Jones, R.N.**  
P.O. Box 315  
Warsaw, KY 41095  
606-567-2844

Fivco District Health Department  
**Martha Vannatter, R.N.**  
2924 Holt Street  
P.O. Box 4069  
Ashland, KY 41105-4069  
606-329-9444

Kentucky River District Health Department  
Letcher County Center  
**Anthony Garrett, R.S.**  
P.O. Box 300  
Corner Broadway & Webb  
Whitesburg, KY 4185  
606-633-2945

Little Sandy District Health Department  
**Cindy Rucker, R.N.**  
Carter County Center  
P.O. Box 98  
Olive Hill, KY 41164  
606-286-2524 (school)

North Central District Health Department  
Shelby County Center  
**Sue Hochstedler, R.N.**  
419 Washington St.  
P.O. Box 254  
Shelbyville, KY 40065  
502-633-1231

Purchase District Health Department  
(Mayfield Branch)  
**Tracey Pierceall, R.N.**  
**Eddie Seay, R.S.**  
320 N. 7th Street, P.O. Box 414  
Mayfield, KY 42066  
502-247-1490

Wedco District Health Department  
**Anita Tackett, R.N.**  
P.O. Box 218  
Cynthiana, KY 41031  
606-234-8750

West Blue Grass District Health Department  
Mercer County Center  
**Tony White, R.S.**  
900 North College  
Harrodsburg, KY 40330  
606-734-4522

Gateway District Health Department  
**Ethel Castle, R.N.**  
Gudgell Street  
P.O. Box 555  
Owingsville, KY 40360  
606-674-6396

Lake Cumberland District Health Department  
Adair County Center  
**Virgie Glaycomb, A.R.N.P.**  
**Jeff Gosser, R.S.**  
904 Westlake Drive  
Columbia, KY 42728  
502-384-2286

Northern Kentucky District Health Department  
Kenton County Center  
**Fran Fields, R.N.**  
912 Scott Street  
Covington, KY 41011  
606-581-3886

Trimble County Center  
**Nancy Wason, R.N.**  
Millers Lane  
P.O. Box 250  
Bedford, KY 40006  
502-255-7701

Three Rivers District Health Department  
**Richard Hampton, R.S.**  
327 North Main Street  
Suite 5  
Owenton, Ky 40359-1409  
502-484-5736  
502-484-3412 & 3238 (District Office)

West Bluegrass District Health Department  
**Murline Penn, R.N.**  
106 First Street  
P.O. Box 477  
Burgin, KY 40310  
606-748-5242

#### SINGLE COUNTY HEALTH DEPARTMENT MEMBERS

Anderson County Health Department  
**Bill Bollinger, R. S.**  
208 S. Main Street  
Lawrenceburg, KY 40342  
502-839-4551

Christian County Health Department  
**Mike Adams, R.S.**  
1700 Canton Street  
P.O. Box 647  
Hopkinsville, KY 42241-0647  
502-887-4160

Boyle County Health Department  
**Vicky Ratiff, R.N.**  
**Mark Reed, R.S.**  
448 South Third Street  
P.O. Box 398  
Danville, KY 40423-0398  
606-236-2053

Clark County Health Department  
**Margaret Copenhaver, R.N.**  
400 Professional Avenue  
Winchester, KY 40391  
606-744-4482

Bullitt County Health Department  
**Mary Ann Blanton, R.S.**  
**Ruby Morris, R.N.**  
181 Lees Valley Road  
P. O. Box 278  
Shepherdsville, KY 40165  
502-543-2415 and 955-7837

Floyd County Health Department  
**Jane Bond, Health Educator**  
21 Front Street  
P.O. Box 188  
Prestonsburg, KY 41653  
606-886-2788

**SINGLE COUNTY HEALTH DEPARTMENT MEMBERS - continued:**

## Franklin County Health Department

**Kendra Palmer, R.S.**  
100 Glenns Creek Road  
Frankfort, KY 40342  
502-564-7382

## Greenup County Health Department

**Eve Greene, R.N.**  
**Ginger Miller, R.S.**  
U.S. 23  
P.O. Box 377  
Greenup, KY 41144  
606-473-9838

## Hopkins County Health Department

**Barry Franklin, R.S.**  
412 Kentucky Avenue  
P.O. Box 1266  
Madisonville, KY 42431  
502-821-5242

## Jefferson County Health Department

**Deborah Embry, R.N.**  
**Diane Franconia, R. N.**  
400 East Gray Street  
P.O. Box 1704  
Louisville, KY 40202  
502-574-6677

## Jessamine County Health Department

**Tara Bilbrey, R.S.**  
606-885-2310  
Paula Gullette, R.N.  
215 East Maple Street  
Nicholasville, KY 40356-1203  
606-885-4149

## Knox County Health Department

**Jerri Campbell, R.N.**  
Liberty Street  
P.O. Box 1689  
Barbourville, KY 40906-0897  
606-546-3486 and 546-6294

## Lexington-Fayette County Health Department

**Eloise Beebout, R.N.**  
650 Newtown Pike  
Lexington, KY 40508  
606-288-7516  
Holly Coleman, R.S.  
333 Waller Avenue, Fourth Floor  
Lexington, KY 40504  
606-231-9791 ext. 236

## Lincoln County Health Department

**Jackie McMurtry, R.N.**  
Health Avenue  
P.O. Box 165  
Stanford, KY 40484  
606-365-3106

## Madison County Health Department

**Wayne Tudor, R.N.**  
Boggs Lane  
P.O. Box 906  
Richmond, KY 40476-0906  
606-623-7312

## Magoffin County Health Department

**Kathy Hembree, R.N.**  
723 Parkway Drive  
P.O. Box 610  
Salyersville, KY 41465  
606-349-6212

## Marshall County Health Department

**Margret Robertson, R.N.**  
**Jim Siress, R.S.**  
307 East 12th Street  
P.O. Box 607  
Benton, KY 42025  
502-527-1496

## Martin County Health Department

**Glenda Grayson, Sr., Clinical Assistant**  
Main Street  
P.O. Box 354  
Inez, KY 41224  
606-298-7752

## Monroe County Health Department

**Amy Hale, R.N.**  
P.O. Box 247  
Tompkinsville, KY 42167  
502-487-6782

## Montgomery County Health Department

**Sharon Owen, R.N.**  
117 Civic Center  
Mt. Sterling, KY 40353  
606-498-3808

## Muhlenburg County Health Department

**Joe Bean, R.S.**  
Legion Drive  
P.O. Box 148  
Central City, KY 42330  
502-754-5741

## Oldham County Health Department

**Dottie Ochsner, R.N.**  
502-222-3519 ext. 32  
Pam Sparrow, R.N.  
Highway 146  
P.O. Box 53  
LaGrange, KY 40031  
502-222-3516 ext. 29

## Pike County Health Department

**Debbie Mullins, R.N.**  
100 River Road  
Pikeville, KY 41501  
606-437-5500

## Powell County Health Department

**Joanne Campbell, R.N.**  
Main Street  
P.O. Box 460  
Stanton, KY 40380  
606-663-4360

## Todd County Health Department

**Louis Wilson, R.S.**  
205 McReynolds  
P.O. Box 305  
Elkton, KY 42220  
502-265-2362

## Whitley County Health Department

**Bill Patton, R.S.**  
P.O. Box 147  
Williamsburg, KY 40769  
606-549-3380

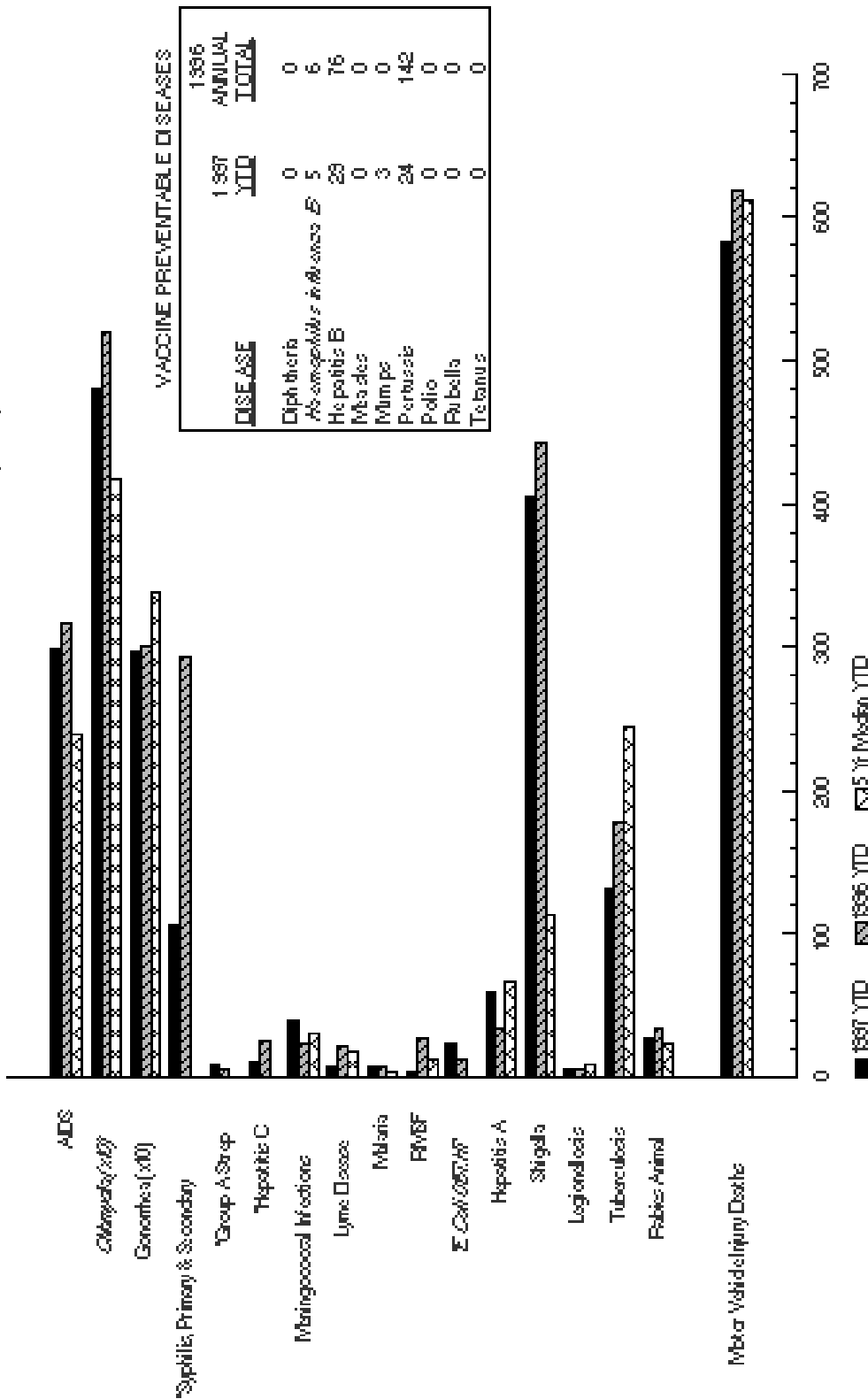
## Woodford County Health Department

**Tracey Giles, R.N.**  
229 North Main Street  
Versailles, KY 40383  
606-873-4541

**Informational Note** - We're experiencing a problem within our "mailroom" when receiving the "Reportable Disease Form" which has been completed and mailed. In the future, please address forms to:

**Pat Beeler**  
**Division of Epidemiology & Health Planning**  
**Surveillance & Investigations Branch**  
**275 East Main Street, Mail Stop HS 2 CB**  
**Frankfort, KY 40621-0001**

CASES OF SELECTED REPORTABLE DISEASES IN KENTUCKY, YEAR TO DATE (YTD) THROUGH SEPTEMBER 1997



\*Historical data are not available.  
Disease numbers reflect only those cases which meet the CDC surveillance definition.  
Contributed by: Patricia Boeller, Surveillance & Intervention Branch.

**KENTUCKY EPIDEMIOLOGIC NOTES & REPORTS**

Printed With State Funds

by the

COMMONWEALTH OF KENTUCKY  
CABINET FOR HEALTH SERVICES  
DEPARTMENT FOR PUBLIC HEALTH  
275 EAST MAIN STREET  
FRANKFORT, KENTUCKY 40621

*Kentucky Epidemiologic Notes and Reports* is a free, monthly publication of the Kentucky Department for Public Health. Materials may be reproduced without permission. For more information call 502-564-3418.

**Rice C. Leach, MD**, Commissioner  
Department for Public Health  
and

**Rice C. Leach**, Acting Director,  
Division of Epidemiology & Health Planning

**Clarkson Palmer, MD, MPH**, Acting State Epidemiologist,

**Joyce A. Bothe**, Editor, Assistant Director,  
Division of Epidemiology & Health Planning

**Nancy Yates**, Managing Editor

**Contributors to this issue:**

Theresa Renn, RN  
Peggy Wright, RN

❖ NOVEMBER — IS NATIONAL DIABETES MONTH ❖

**Recommendation on the Diagnosis and Classification of Diabetes Mellitus** (continued from page 1)

- Selective rather than universal screening is now recommended for gestational diabetes. Women at "low risk" are those who satisfy all of the following criteria: < 25 years old, normal weight, no family history of diabetes, and not a member of an ethnic/racial group with a high prevalence of diabetes.

**Impact of the new recommendations**

The number of people who will shift from undiagnosed to diagnosed diabetes utilizing the new recommendations is estimated at 2 million. The diagnosis of diabetes earlier in its course is expected to reduce the long-term human and medical costs of the serious complications of the disease. For more information please call Theresa Renn, RN, CDE, at (502) 564-7996.

References are available upon request.

*Reminder . . . .*

**Encourage adults, especially those in high risk categories, to receive flu and pneumonia immunizations!**